

IN THE CLAIMS:

1. (Currently amended) A control unit for an internal combustion engine ~~including the three-way~~ having a three-way catalyst and HC adsorbent on an exhaust side of the engine,

~~wherein~~ said control unit being configured alternately ~~controls the A/F to~~ control air-fuel ratio (A/F) between a rich state and a lean state ~~in order to~~ quicken the activation of said ~~three-way~~ three-way catalyst when upon starting of said internal combustion engine ~~starts~~.

2.-3. (Cancelled)

4. (Currently amended) A control unit for an internal combustion engine ~~including the three-way~~ having a three-way catalyst on an exhaust side of the engine,

~~wherein~~ said control unit ~~has a~~ having means for detecting the temperature of said ~~three-way~~ three-way catalyst ~~directly or indirectly~~, and

~~wherein control unit~~ being configured to alternately ~~controls the A/F~~ control air-fuel ratio (A/F) between a rich state and a lean state ~~in order to~~ quicken the activation of the ~~three-way~~ three-way catalyst ~~when the~~ if a temperature of said three way three-way catalyst is a value within ~~the~~ a predetermined fixed range.

5. (Currently amended) A control unit for an internal combustion engine ~~including the three-way~~ having a three-way catalyst on an exhaust side of the engine,

~~wherein said~~ control unit ~~has a~~ having means for detecting the an operating state of the internal combustion engine, and

~~wherein control unit being configured to alternately controls the A/F~~ control air-fuel ratio (A/F) between a rich state and a lean state ~~in order to~~ quicken the activation of ~~the three-way~~ said three-way catalyst based on ~~the an~~ operating state.

6. (Currently amended) A control unit for an internal combustion engine ~~including the three-way~~ having a three-way catalyst and HC adsorbent operatively arranged in order on an exhaust side ~~in the order of the engine~~,

~~wherein said~~ control unit ~~has a~~ having means for detecting ~~the a~~ temperature of said HC adsorbent ~~directly or indirectly~~, and

~~wherein control unit being configured to alternately controls the A/F~~ control air-fuel ratio (A/F) between a rich state and a lean state ~~in order to~~ change the temperature of said HC adsorbent.

7. (Currently amended) The control unit ~~for an internal combustion engine~~ according to claim 6,

wherein said control unit is configured to alternately ~~controls~~ control the A/F between a rich state and a lean state when the temperature of said HC adsorbent is within the predetermined fixed range.

8. (Currently amended) A control unit for an internal combustion engine ~~including~~ having a catalyst ~~which has the three-way~~ comprising a three-way catalyst and HC adsorbent in the same carrier on an exhaust side of the engine,

~~wherein~~ said control unit being configured alternately ~~controls the A/F to~~ control air-fuel ratio (A/F) between a rich state and a lean state ~~in order to~~ change ~~the~~ a temperature of said HC adsorbent.